REMARKS

Claims 1-25 are pending in the present application. Claims 11-15 and 23-25 have been withdrawn from consideration by the Office. Claims 1-10 and 16-22 have been rejected by the Office.

Restriction Requirement

The Office has made the Restriction Requirement final and has therefore withdrawn claims 11-15 and 23-25 from consideration. For the reasons of record, Applicant continues to disagree with the Office concerning the Restriction Requirement, but acknowledges the finality of the restriction requirement.

Claim Rejection 35 U.S.C. § 102(b)

Claims 1-10 and 16-22 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kitamura (U.S. Patent No. 5,739,061) for the reasons detailed on pages 2-3 of the Office Action. Applicant respectfully traverses this rejection.

The rejected independent claims contain the limitation that the transistor contains a channel with a substantially uniform impurity concentration. The Office, however, has not shown that Figures 1 and 2 of Kitamura et al. disclose a device containing such a feature.

Kitamura et al. disclose a semiconductor device containing a transistor as illustrated in Figures 1 and 2. The device of Kitamura et al. depicted in Figures 1 and 2 contains a substrate 1, a buried layer 2, an epitaxial layer 3 that is grown on the buried layer 2, and a p-type well 5 and an n-type well 6 in the epitaxial layer 3. See also column 9, line 63 through column 10, line 15.

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This device also contains a channel layer 8 that is formed by an ion implantation process. See also column 10, lines 18-20.

As illustrated, the channel region 8 extends from one end of the p-well 5, through the p-well 5, and then into epitaxial layer 3. *See Figures 1-2*. The impurity profile along cross-section AB, including channel region 8, is illustrated in FIG. 3(a). In Figure 3(a), the impurity concentration varies along the length of channel layer 8. While Figure 3(a) depicts that the impurity concentration is relatively uniform, it is only for minor portions of channel region 8. But along the length of the whole channel region 8, the impurity concentration can not be interpreted to be substantially uniform. The skilled artisan, when viewing Figure 3(a), would necessarily understand that Kitamura et al. does not teach a transistor containing a channel region with a substantially uniform impurity concentration.

The Office also alleges that since the claims do not distinguish between a similarly doped well region and a second channel stop region, these regions can be considered to be continuous with each other and essentially indistinguishable from each other. Again, Applicant respectfully disagrees. Applicant's doped Nwell region is distinguishable from the second channel-stop region because the doped Nwell region has an impurity type opposite that of the second channel stop region.

Thus, the Office has not shown that Kitamura et al. disclose every limitation in the rejected claims. Accordingly, Applicant requests withdrawal of this ground of rejection.

CONCLUSION

For the above reasons, as well as those of record, Applicant respectfully requests withdrawal of this ground of rejection and allowance of the pending claims.

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If there is any fee due in connection with the filing of this Response, including a fee for any extension of time not accounted for above, please charge the fee to our Deposit Account No. 50-0843.

Respectfully Submitted,

By

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Reg. No. 39,481

Date: December 21, 2004

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